

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Product name : ipox EH 2046-2  
Revision date : 02.11.2016  
Print date : 2016.11.02.

Version (Revision) : 1.1.0 (1.0.1)

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

ipox EH 2046-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses**

Building and construction work Uses in coatings Curing agent for epoxy systems.

### 1.3 Details of the supplier of the safety data sheet

**Supplier (manufacturer/importer/only representative/downstream user/distributor)**

ipox chemicals Kft.

**Street :** Helsinki út. 114

**Postal code/city :** 1238 BUDAPEST

**Telephone :** +3614217040

**Telefax :** +3614217041

**Information contact :** sds@ipox-chemicals.hu

### 1.4 Emergency telephone number

+3614217042 Only available during office hours: from 8am to 5pm (in German and English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aquatic Acute 1 ; H400 - Hazardous to the aquatic environment : Category 1 ; Very toxic to aquatic life.

Aquatic Chronic 1 ; H410 - Hazardous to the aquatic environment : Category 1 ; Very toxic to aquatic life with long lasting effects.

Acute Tox. 4 ; H302 - Acute toxicity (oral) : Category 4 ; Harmful if swallowed.

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

Skin Corr. 1A ; H314 - Skin corrosion/irritation : Category 1A ; Causes severe skin burns and eye damage.

Repr. 2 ; H361fd - Reproductive toxicity : Category 2 ; Suspected of damaging fertility. Suspected of damaging the unborn child.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.

### 2.2 Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms**



Health hazard (GHS08) · Corrosion (GHS05) · Environment (GHS09) · Exclamation mark (GHS07)

**Signal word**

Danger

**Hazard components for labelling**

REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2

2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2

4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3

**Hazard statements**

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H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.  
H314 Causes severe skin burns and eye damage.  
H302 Harmful if swallowed.  
H317 May cause an allergic skin reaction.  
H410 Very toxic to aquatic life with long lasting effects.

### Precautionary statements

P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P310 Immediately call a POISON CENTER/doctor.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

### 2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## SECTION 3: Composition / information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE); REACH registration No. : 01-2119557899-12-xxxx; CAS No. : 9046-10-0

Weight fraction :  $\geq 25 - < 50$  %  
Classification 1272/2008 [CLP] : Skin Corr. 1C ; H314 Eye Dam. 1 ; H318 Aquatic Chronic 2 ; H411

BENZYL ALCOHOL ; REACH registration No. : 01-2119492630-38-xxxx ; EC No. : 202-859-9; CAS No. : 100-51-6

Weight fraction :  $\geq 10 - < 25$  %  
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; REACH registration No. : 01-2119514687-32-xxxx ; EC No. : 220-666-8; CAS No. : 2855-13-2

Weight fraction :  $\geq 10 - < 25$  %  
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

2-METHYLPENTANE-1,5-DIAMINE ; REACH registration No. : 01-211-9976310-41-xxxx ; EC No. : 239-556-6; CAS No. : 15520-10-2

Weight fraction :  $\geq 5 - < 10$  %  
Classification 1272/2008 [CLP] : Skin Corr. 1A ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 STOT SE 3 ; H335

4-NONYLPHENOL, BRANCHED ; REACH registration No. : 01-2119510715-45-xxxx ; EC No. : 284-325-5; CAS No. : 84852-15-3 (M=10)

Weight fraction :  $\geq 5 - < 10$  %  
Classification 1272/2008 [CLP] : Repr. 2 ; H361fd Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

#### Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH 4-NONYLPHENOL, BRANCHED (CAS:84852-15-3)

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated, saturated clothing immediately. Wash thoroughly the body (shower or bath).

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Remove affected person from the danger area and lay down. Transport affected person in flat position. Put victim at rest, cover with a blanket and keep warm. Do not leave affected person unattended.

### Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. In case of skin reactions, consult a physician. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure. In case of skin irritation, consult a physician.

### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.

### After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.

### Self-protection of the first aider

First aider: Pay attention to self-protection!

## 4.2 Most important symptoms and effects, both acute and delayed

Following inhalation Irritation to respiratory tract Pulmonary irritation

Following skin contact Causes severe burns. erythema (redness) May cause an allergic skin reaction.

After eye contact Causes serious eye damage.

After ingestion Causes severe burns. Gastrointestinal complaints Abdominal pain If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. First Aid, decontamination, treatment of symptoms. Subsequent observance for pneumonia and lung oedema.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>) Extinguishing powder alcohol resistant foam Water spray Water

#### Unsuitable extinguishing media

Strong water jet

### 5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>) Carbon monoxide. Carbon dioxide (CO<sub>2</sub>) Ammonia (NH<sub>3</sub>) Phenols

### 5.3 Advice for firefighters

#### Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Use personal protection equipment. See protective measures under point 7 and 8.

#### For emergency responders

Use personal protection equipment. Provide adequate ventilation. Remove persons to safety. See protective measures

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under point 7 and 8.

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### 6.3 Methods and material for containment and cleaning up

#### For containment

Cover drains. Stop leak if safe to do so. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal.

#### For cleaning up

Collect in closed and suitable containers for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4 Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Protective measures

It is recommended to design all work processes always so that the following is excluded: Inhalation of vapours or spray/mists Skin contact Eye contact

Wear personal protection equipment (refer to section 8). If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

#### Measures to prevent fire

Keep away from sources of ignition. - No smoking. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

#### Environmental precautions

Shafts and sewers must be protected from entry of the product. Provide for retaining containers, eg. floor pan without outflow.

#### Advices on general occupational hygiene

Working places should be designed to allow cleaning at any time. Floors, walls and other surfaces in the hazard area must be cleaned regularly. After use replace the closing cap immediately. Wash hands and face before breaks and after work and take a shower if necessary. Wash hands before eating, drinking or smoking. Remove contaminated, saturated clothing immediately. Wash contaminated clothing prior to re-use.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Only use containers specifically approved for the substance/product. Protect containers against damage. Keep container tightly closed and in a well-ventilated place.

#### Packaging materials

Unsuitable container/equipment material: Copper Alloy, containing copper

#### Hints on joint storage

**Storage class :** 8A

**Storage class (TRGS 510) :** 8A

#### Keep away from

Acid Oxidising agent

Keep away from food, drink and animal feedingstuffs.

### 7.3 Specific end use(s)

Observe technical data sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### DNEL/DMEL and PNEC values

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### DNEL/DMEL

Limit value type : DNEL Consumer (local) ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 0,311 mg/cm<sup>2</sup>

Limit value type : DNEL Consumer (systemic) ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )

Exposure route : Oral  
Exposure frequency : Long-term (repeated)  
Limit value : 0,526 mg/kg

Limit value type : DNEL Consumer (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Dermal  
Exposure frequency : Short-term (acute)  
Limit value : 7,6 mg/kg

Limit value type : DNEL Consumer (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 3,8 mg/kg

Limit value type : DNEL Consumer (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Inhalation  
Exposure frequency : Short-term (acute)  
Limit value : 0,8 mg/m<sup>3</sup>

Limit value type : DNEL Consumer (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Inhalation  
Exposure frequency : Long-term (repeated)  
Limit value : 0,4 mg/m<sup>3</sup>

Limit value type : DNEL Consumer (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Oral  
Exposure frequency : Short-term (acute)  
Limit value : 0,4 mg/kg

Limit value type : DNEL Consumer (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Oral  
Exposure frequency : Long-term (repeated)  
Limit value : 0,08 mg/kg

Limit value type : DNEL Consumer (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Exposure route : Dermal  
Exposure frequency : Short-term (acute)  
Limit value : 28,5 mg/kg

Limit value type : DNEL Consumer (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 5,7 mg/kg

Limit value type : DNEL Consumer (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Exposure route : Inhalation  
Exposure frequency : Short-term (acute)  
Limit value : 95,5 mg/m<sup>3</sup>

Limit value type : DNEL Consumer (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Exposure route : Inhalation  
Exposure frequency : Long-term (repeated)  
Limit value : 19,1 mg/m<sup>3</sup>

Limit value type : DNEL Consumer (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Exposure route : Oral  
Exposure frequency : Short-term (acute)  
Limit value : 25 mg/kg

Limit value type : DNEL Consumer (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

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Exposure route : Oral  
Exposure frequency : Long-term (repeated)  
Limit value : 5 mg/kg  
Limit value type : DNEL Consumer (systemic) ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 1,25 mg/kg  
Limit value type : DNEL Consumer (systemic) ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )

Exposure route : Oral  
Exposure frequency : Long-term (repeated)  
Limit value : 0,04 mg/kg  
Limit value type : DNEL worker (local) ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 0,623 mg/cm<sup>2</sup>  
Limit value type : DNEL worker (local) ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 1,5 mg/kg  
Limit value type : DNEL worker (local) ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )

Exposure route : Inhalation  
Exposure frequency : Short-term (acute)  
Limit value : 0,5 mg/m<sup>3</sup>  
Limit value type : DNEL worker (local) ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )

Exposure route : Inhalation  
Exposure frequency : Long-term (repeated)  
Limit value : 0,25 mg/m<sup>3</sup>  
Limit value type : DNEL worker (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Dermal  
Exposure frequency : Short-term (acute)  
Limit value : 15 mg/kg  
Limit value type : DNEL worker (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 7,5 mg/kg  
Limit value type : DNEL worker (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Inhalation  
Exposure frequency : Short-term (acute)  
Limit value : 1 mg/m<sup>3</sup>  
Limit value type : DNEL worker (systemic) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Exposure route : Inhalation  
Exposure frequency : Long-term (repeated)  
Limit value : 0,5 mg/m<sup>3</sup>  
Limit value type : DNEL worker (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Exposure route : Dermal  
Exposure frequency : Short-term (acute)  
Limit value : 47 mg/kg  
Limit value type : DNEL worker (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 9,5 mg/kg

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Limit value type : DNEL worker (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Exposure route : Inhalation  
Exposure frequency : Short-term (acute)  
Limit value : 450 mg/m<sup>3</sup>  
Limit value type : DNEL worker (systemic) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Exposure route : Inhalation  
Exposure frequency : Long-term (repeated)  
Limit value : 5 mg/kg  
Limit value type : DNEL worker (systemic) ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-  
PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA  
(POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 2,5 mg/kg

### PNEC

Limit value type : PNEC aquatic, freshwater ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ;  
CAS No. : 2855-13-2 )  
Limit value : 0,06 mg/l  
Limit value type : PNEC aquatic, freshwater ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Limit value : 0,00061 mg/l  
Limit value type : PNEC aquatic, freshwater ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Limit value : 1 mg/l  
Limit value type : PNEC aquatic, freshwater ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-  
PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA  
(POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Limit value : 0,015 mg/l  
Limit value type : PNEC aquatic, freshwater ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )  
Limit value : 0,42 mg/l  
Limit value type : PNEC aquatic, intermittent release ( 3-AMINOMETHYL-3,5,5-  
TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Limit value : 0,23 mg/l  
Limit value type : PNEC aquatic, intermittent release ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-  
15-3 )  
Limit value : 0,00017 mg/l  
Limit value type : PNEC aquatic, intermittent release ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Limit value : 2,3 mg/l  
Limit value type : PNEC aquatic, intermittent release ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. :  
15520-10-2 )  
Limit value : 0,42 mg/l  
Limit value type : PNEC aquatic, marine water ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ;  
CAS No. : 2855-13-2 )  
Limit value : 0,006 mg/l  
Limit value type : PNEC aquatic, marine water ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Limit value : 0,00053 mg/l  
Limit value type : PNEC aquatic, marine water ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Limit value : 0,1 mg/l  
Limit value type : PNEC aquatic, marine water ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-  
PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA  
(POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Limit value : 0,0143 mg/l  
Limit value type : PNEC aquatic, marine water ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2  
)  
Limit value : 0,042 mg/l  
Limit value type : PNEC sediment, freshwater ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ;  
CAS No. : 2855-13-2 )  
Limit value : 5,784 mg/kg  
Limit value type : PNEC sediment, freshwater ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Limit value : 4,62 mg/kg

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Limit value type :	PNEC sediment, freshwater ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )
Limit value :	5,27 mg/kg
Limit value type :	PNEC sediment, freshwater ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )
Limit value :	0,132 mg/kg
Limit value type :	PNEC sediment, marine water ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )
Limit value :	0,578 mg/kg
Limit value type :	PNEC sediment, marine water ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )
Limit value :	1,23 mg/kg
Limit value type :	PNEC sediment, marine water ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )
Limit value :	0,527 mg/kg
Limit value type :	PNEC sediment, marine water ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )
Limit value :	0,125 mg/kg
Limit value type :	PNEC soil ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )
Limit value :	1,121 mg/kg
Limit value type :	PNEC soil ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )
Limit value :	2,3 mg/kg
Limit value type :	PNEC soil ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )
Limit value :	0,456 mg/kg
Limit value type :	PNEC soil ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )
Limit value :	0,0176 mg/kg
Limit value type :	PNEC Secondary Poisoning ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )
Limit value :	2,36 mg/kg
Limit value type :	PNEC Secondary Poisoning ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )
Limit value :	6,93 mg/kg
Limit value type :	PNEC sewage treatment plant (STP) ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )
Limit value :	3,18 mg/l
Limit value type :	PNEC sewage treatment plant (STP) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )
Limit value :	9,5 mg/l
Limit value type :	PNEC sewage treatment plant (STP) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )
Limit value :	39 mg/l
Limit value type :	PNEC sewage treatment plant (STP) ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )
Limit value :	7,5 mg/l

## 8.2 Exposure controls

### Appropriate engineering controls

Provide for sufficient ventilation. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Technical measures and the application of suitable work processes have priority over personal protection equipment.

### Personal protection equipment

#### Eye/face protection

##### Suitable eye protection

Eye glasses with side protection

DIN-/EN-Norms : DIN EN 166

Provide eye shower and label its location conspicuously



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## according to Regulation (EC) No. 1907/2006 (REACH)

**Product name :** ipox EH 2046-2  
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### Skin protection

#### Hand protection

**Suitable gloves type :** Gloves with long cuffs

**Suitable material :** PVC (Polyvinyl chloride) CR (polychloroprene, chloroprene rubber) Butyl caoutchouc (butyl rubber) PVA (Polyvinyl alcohol) FKM (fluoro rubber)

**Wearing time with occasional contact (splashes) :** > 60 min

**Wearing time with permanent contact :** > 480 min

**Remark :** When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Breakthrough times and swelling properties of the material must be taken into consideration.

Tested protective gloves must be worn

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

DIN-/EN-Norms : DIN EN 374

#### Body protection

Suitable protective clothing

**Remark :**

DIN-/EN-Norms

Protective clothing : DIN EN 14605

footwear : DIN EN ISO 20345

Breakthrough times and swelling properties of the material must be taken into consideration.

Only wear fitting, comfortable and clean protective clothing.

### Respiratory protection

Usually no personal respirative protection necessary. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: exceeding exposure limit values insufficient ventilation insufficient exhaust

#### Suitable respiratory protection apparatus

Combination filtering device (EN 14387) Filter type: A

#### Remark

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

### General health and safety measures

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Wash contaminated clothing immediately. Wash hands before breaks and after work. Emergency shower installed

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance :** liquid

**Colour :** yellow

**Odour :** Amines

#### Safety relevant basis data

<b>Freezing point :</b>	( 1013 hPa )		No data available
<b>Initial boiling point and boiling range :</b>	( 1013 hPa )	>	200 °C
<b>Decomposition temperature :</b>	( 1013 hPa )		No data available
<b>Flash point :</b>		>	100 °C
<b>Ignition temperature :</b>			No data available
<b>Lower explosion limit :</b>			No data available
<b>Upper explosion limit :</b>			No data available
<b>Vapour pressure :</b>	( 50 °C )	<	5 hPa
<b>Density :</b>	( 25 °C )		No data available

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<b>Relative density :</b>	( 20 °C )	No data available	
<b>Water solubility :</b>	( 20 °C )	No data available	
<b>pH :</b>	( 20 °C / 10 g/l )	No data available	
<b>log P O/W :</b>		No data available	
<b>Flow time :</b>	( 20 °C )	No data available	DIN-cup 4 mm
<b>Viscosity :</b>	( 25 °C )	15	mPa.s
<b>Odour threshold :</b>		No data available	
<b>Relative vapour density :</b>	( 20 °C )	No data available	
<b>Evaporation rate :</b>		No data available	
<b>VOC-value :</b>		max. 225	g/l
<b>Flammable solids :</b>	Not applicable.		
<b>Flammable gases :</b>	Not applicable.		
<b>Oxidising liquids :</b>	Not oxidizing.		
<b>Explosive properties :</b>	Not applicable.		

## 9.2 Other information

partially miscible : Water

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product is stable under storage at normal ambient temperatures.

### 10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 Possibility of hazardous reactions

Violent reaction with: Oxidising agent, strong. Strong acid

### 10.4 Conditions to avoid

Keep away from heat.

### 10.5 Incompatible materials

Oxidising agent, strong. Strong acid

### 10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

##### Acute oral toxicity

Parameter :	LC50 ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )
Exposure route :	Oral
Species :	Rat
Effective dose :	1620 mg/kg
Parameter :	LD50 ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )
Exposure route :	Oral
Species :	Rat
Effective dose :	1030 mg/kg
Method :	OECD 401
Parameter :	LD50 ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 300 - 2000 mg/kg
Parameter :	LD50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )
Exposure route :	Oral

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Species : Rat  
Effective dose : 2885,3 mg/kg  
Parameter : LD50 ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )  
Exposure route : Oral  
Species : Rat  
Effective dose : 1170 mg/kg

### Acute dermal toxicity

Parameter : LD50 ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Exposure route : Dermal  
Species : Rat  
Effective dose : > 2000 mg/kg  
Method : OECD 402  
Parameter : LD50 ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : 2140 mg/kg  
Parameter : LD50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : 2979,7 mg/kg  
Parameter : LD50 ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : 1870 mg/kg

### Acute inhalation toxicity

Parameter : LC50 ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : > 5,01 mg/l  
Exposure time : 4 h  
Method : OECD 403  
Parameter : LC50 ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : > 4178 mg/m<sup>3</sup>  
Exposure time : 4 h  
Method : OECD 403  
Parameter : LC50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : > 0,74 mg/l  
Exposure time : 8 h  
Parameter : LC50 ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : 4,9 mg/l  
Exposure time : 1 h

### Irritant and corrosive effects

Product characteristics : Causes severe skin burns and eye damage.

#### Primary irritation to the skin

Parameter : Primary irritation to the skin ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )

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Species : Rabbit  
Result : Corrosive  
Method : OECD 404  
Parameter : Primary irritation to the skin ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Species : Rabbit  
Result : Not an irritant.  
Method : OECD 404  
Parameter : Primary irritation to the skin ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Species : Rabbit  
Result : Corrosive  
Method : OECD 404  
Parameter : Primary irritation to the skin ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Species : Rabbit  
Result : Corrosive  
Method : OECD 404

Product characteristics : Corrosive

### Irritation to eyes

Parameter : Irritation to eyes ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Species : Rabbit  
Result : Corrosive  
Method : OECD 405  
Parameter : Irritation to eyes ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Species : Rabbit  
Result : slightly irritant  
Method : OECD 405  
Parameter : Irritation to eyes ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Species : Rabbit  
Result : Corrosive  
Method : OECD 405  
Parameter : Irritation to eyes ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Species : Rabbit  
Result : Corrosive  
Method : OECD 405

Product characteristics : Causes serious eye damage.

### Sensitisation

#### In case of skin contact

Parameter : Skin sensitisation ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Species : Guinea pig  
Result : Not sensitising.  
Method : OECD 406  
Parameter : Skin sensitisation ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Species : Guinea pig  
Result : Sensitising. Strong sensitiser (Subcategory 1A).  
Method : OECD 406  
Parameter : Skin sensitisation ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Species : Guinea pig  
Result : Not sensitising.  
Method : OECD 406

Product characteristics : May cause sensitisation by skin contact.

#### In case of inhalation

Product characteristics : Based on available data, the classification criteria are not met.

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## CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

4-NONYLPHENOL, BRANCHED (CAS:84852-15-3) This substance is classified as Repr. 2, H361 Suspected of damaging fertility. Suspected of damaging the unborn child.

### Reproductive toxicity

#### Adverse effects on sexual function and fertility

Parameter : NOAEL(C) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Exposure route : Oral  
Species : Rat  
Test result : Positive.

### Developmental toxicity/teratogenicity

#### One generation reproduction toxicity test

Parameter : NOAEL(C) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Exposure route : Oral  
Species : Rat  
Effective dose : 300 mg/kg  
Method : OECD 414

### Overall Assessment on CMR properties

Classification of mixtures as having effects of carcinogenicity, mutagenicity or toxicity for reproduction must be calculated from available information regarding substances in the mixture.

### STOT-single exposure

Based on available data, the classification criteria are not met.

### STOT-repeated exposure

Based on available data, the classification criteria are not met.

### Aspiration hazard

Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

##### Acute (short-term) fish toxicity

Parameter : LC50 ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Species : Leuciscus idus (golden orfe)  
Effective dose : 110 mg/l  
Exposure time : 96 h  
Parameter : LC50 ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Species : Pimephales promelas (fathead minnow)  
Effective dose : > 0,1 - 1 mg/l  
Exposure time : 96 h  
Parameter : LC50 ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Species : Pimephales promelas (fathead minnow)  
Effective dose : 460 mg/l  
Exposure time : 96 h  
Parameter : LC50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Species : Fish  
Effective dose : > 15 mg/l  
Exposure time : 96 h  
Method : OECD 203  
Parameter : EC50 ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )  
Species : Fish  
Effective dose : > 1825 mg/l

##### Chronic (long-term) fish toxicity

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Parameter : NOEC ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Species : Oncorhynchus mykiss (Rainbow trout)  
Effective dose : 0,006 mg/l  
Exposure time : 91 day

### Acute (short-term) daphnia toxicity

Parameter : EC50 ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )

Species : Daphnia magna (Big water flea)  
Effective dose : 23 mg/l  
Exposure time : 48 h  
Method : OECD 202

Parameter : EC50 ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Species : Daphnia magna (Big water flea)  
Effective dose : > 0,01 - 0,1 mg/l  
Exposure time : 48 h

Parameter : EC50 ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Species : Daphnia magna (Big water flea)  
Effective dose : 230 mg/l  
Exposure time : 48 h  
Method : OECD 202

Parameter : EC50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )

Species : Daphnia magna (Big water flea)  
Effective dose : 80 mg/l  
Exposure time : 48 h  
Method : OECD 202

Parameter : EC50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )

Effective dose : 418,34 mg/l  
Exposure time : 48 h  
Method : ISO 6341

Parameter : EC50 ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )

Species : Daphnia magna (Big water flea)  
Effective dose : 19,8 mg/l  
Exposure time : 48 h

### Chronic (long-term) daphnia toxicity

Parameter : NOEC ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )

Species : Daphnia magna (Big water flea)  
Effective dose : 3 mg/l  
Exposure time : 21 day  
Method : OECD 202

Parameter : NOEC ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Species : Daphnia magna (Big water flea)  
Effective dose : 0,024 mg/l  
Exposure time : 21 day  
Method : OECD 202

Parameter : NOEC ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )

Species : Daphnia magna (Big water flea)  
Effective dose : 51 mg/l  
Exposure time : 21 day  
Method : OECD 211

### Acute (short-term) algae toxicity

Parameter : EC50 ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )

Species : Pseudokirchneriella subcapitata  
Effective dose : > 0,1 - 1 mg/l  
Exposure time : 72 h

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Parameter : EC50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Species : Algae  
Effective dose : 15 mg/l  
Exposure time : 72 h  
Method : OECD 201  
Parameter : EC50 ( 2-METHYLPENTANE-1,5-DIAMINE ; CAS No. : 15520-10-2 )  
Species : Algae  
Effective dose : > 100 mg/l  
Exposure time : 72 h  
Parameter : IC50 ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Species : Pseudokirchneriella subcapitata  
Effective dose : 700 mg/l  
Method : OECD 201  
Parameter : ErC50 ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Species : Scenedesmus subspicatus  
Effective dose : > 50 mg/l  
Exposure time : 72 h  
Parameter : EbC50 ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Species : Algae  
Effective dose : 141,72 mg/l  
Exposure time : 72 h

### Chronic (long-term) algae toxicity

Parameter : NOEC ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Species : Scenedesmus subspicatus  
Effective dose : 1,5 mg/l  
Exposure time : 72 h  
Parameter : NOEC ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Effective dose : > 0,1 - 1 mg/l  
Exposure time : 96 h  
Parameter : NOEC ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Species : Algae  
Effective dose : 0,32 mg/l  
Exposure time : 72 h  
Method : OECD 201

### Bacteria toxicity

Parameter : EC50 ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Effective dose : 390 mg/l  
Exposure time : 24 h  
Parameter : EC10 ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Species : Pseudomonas putida  
Effective dose : 1120 mg/l  
Exposure time : 18 h

### Sediment toxicity

#### Toxicity to soil macroorganisms

##### Acute earthworm toxicity

Parameter : LC50 ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Effective dose : 88,6 mg/kg  
Exposure time : 14 day

### Terrestrial toxicity

#### Toxicity to birds

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### Bird reproduction toxicity

Parameter : NOEC ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Effective dose : 70,8 mg/kg  
Exposure time : 49 day  
Method : OECD 206

## 12.2 Persistence and degradability

### Biodegradation

Parameter : Biodegradation ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Effective dose : 8 %  
Evaluation : Not readily biodegradable (according to OECD criteria)

Parameter : Biodegradation ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Effective dose : 57 - 68 %  
Exposure time : 28 day  
Evaluation : Not readily biodegradable (according to OECD criteria)  
Method : OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D

Parameter : Biodegradation ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Effective dose : 48,2 %  
Exposure time : 35 day  
Evaluation : Not readily biodegradable (according to OECD criteria)  
Method : OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C

Parameter : Biodegradation ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Effective dose : 95 %  
Method : OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A

Parameter : Biodegradation ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Effective dose : 92 %  
Evaluation : Readily biodegradable (according to OECD criteria).  
Method : OECD 302C

Parameter : Biodegradation ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Effective dose : 0 %  
Exposure time : 28 day  
Evaluation : Not readily biodegradable (according to OECD criteria)  
Method : OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C

### 12.3 Bioaccumulative potential

Parameter : Bioconcentration factor (BCF) ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Pimephales promelas (fathead minnow)  
Concentration : 740  
28 day

Parameter : Bioconcentration factor (BCF) ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Concentration : 1,37

Parameter : Partition coefficient: n-octanol/water ( 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2 )  
Concentration : 0,99 logPow

Parameter : Partition coefficient: n-octanol/water ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Concentration : 3,28 logPow

Parameter : Partition coefficient: n-octanol/water ( BENZYL ALCOHOL ; CAS No. : 100-51-6 )  
Concentration : 1,05 logPow

Parameter : Partition coefficient: n-octanol/water ( REACTION PRODUCTS OF DI-, TRI- AND TETRA-PROPOXYLATED PROPANE-1,2-DIOL WITH AMMONIA (POLYOXYPROPYLENEDIAMINE) ; CAS No. : 9046-10-0 )  
Concentration : 1,34 logPow

### 12.4 Mobility in soil

#### Adsorption/Desorption



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Parameter : Mobility in soil ( 4-NONYLPHENOL, BRANCHED ; CAS No. : 84852-15-3 )  
Effective dose : 4,16

### 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6 Other adverse effects

No information available.

### 12.7 Additional ecotoxicological information

None

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product/Packaging disposal

Dispose of waste according to applicable legislation. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Waste treatment options

##### Appropriate disposal / Product

Collect the waste separately. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

##### Appropriate disposal / Package

Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### 14.1 UN number

UN 2735

### 14.2 UN proper shipping name

#### Land transport (ADR/RID)

AMINES, LIQUID, CORROSIVE, N.O.S. ( POLYOXYPROPYLENEDIAMINE · ISOPHORONEDIAMINE )

#### Sea transport (IMDG)

AMINES, LIQUID, CORROSIVE, N.O.S. ( POLYOXYPROPYLENEDIAMINE · ISOPHORONEDIAMINE · 4-NONYLPHENOL, BRANCHED )

#### Air transport (ICAO-TI / IATA-DGR)

AMINES, LIQUID, CORROSIVE, N.O.S. ( POLYOXYPROPYLENEDIAMINE · ISOPHORONEDIAMINE )

### 14.3 Transport hazard class(es)

#### Land transport (ADR/RID)

**Class(es) :** 8  
**Classification code :** C7  
**Hazard identification number (Kemler No.) :** 80  
**Tunnel restriction code :** E  
**Special provisions :** LQ 7 · E 1  
**Hazard label(s) :** 8 / N

#### Sea transport (IMDG)

**Class(es) :** 8  
**EmS-No. :** F-A / S-B  
**Special provisions :** LQ 5 I · E 1 · Segregation Group 18 - Alkalis  
**Hazard label(s) :** 8 / N

#### Air transport (ICAO-TI / IATA-DGR)

**Class(es) :** 8  
**Special provisions :** E 1  
**Hazard label(s) :** 8

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Version (Revision) : 1.1.0 (1.0.1)

## 14.4 Packing group

III

## 14.5 Environmental hazards

Land transport (ADR/RID) : Yes

Sea transport (IMDG) : Yes (P)

Air transport (ICAO-TI / IATA-DGR) : Yes

## 14.6 Special precautions for user

Warning : Corrosive.

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU legislation

##### Authorisations and/or restrictions on use

###### Authorisations

not applicable

###### Restrictions on use

4-NONYLPHENOL, BRANCHED (CAS:84852-15-3)

##### Other regulations (EU)

###### Directive 96/82/EC for danger control following severe accidents with dangerous substances

96/82/EC, Annex I, Part 2: follow quantity limits related to R-phrases

###### Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

###### Labelling for contents according to regulation (EC) No. 648/2004

not applicable

#### National regulations

##### Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : 5 - 10 %

##### Water hazard class (WGK)

Class : 3 (Strongly hazardous to water) Classification according to VwVwS

##### Additional information

Substance/product listed in the following inventories (All components are listed or exempted).

- TSCA
- EINECS/ELINCS/NLP
- DSL/NDSL
- AICS
- KECL
- PICCS
- IECS
- NZIoC

### 15.2 Chemical Safety Assessment

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)

**Product name :** ipox EH 2046-2  
**Revision date :** 02.11.2016  
**Print date :** 2016.11.02.

**Version (Revision) :** 1.1.0 (1.0.1)

Mixture: This information is not available.

### SECTION 16: Other information

#### 16.1 Indication of changes

14. Packing group - Land transport (ADR/RID) · 14. Packing group - Sea transport (IMDG) · 14. Packing group - Air transport (ICAO-TI / IATA-DGR)

#### 16.2 Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

#### 16.3 Key literature references and sources for data

None

#### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

No information available.

#### 16.5 Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### 16.6 Training advice

None

#### 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.